To: Terry, Robert[Terry.Robert@epa.gov]; Allen, HarryL[Allen.HarryL@epa.gov]; Hiatt,

Gerald[Hiatt.Gerald@epa.gov]; Nattis, Randy[Nattis.Randy@epa.gov]; Wise,

Robert[Wise.Robert@epa.gov]

Cc: Black, Ned[Black.Ned@epa.gov]

From: Guria, Peter

**Sent:** Wed 8/12/2015 2:20:44 PM

Subject: RE: Mine Wastes in Arizona - Introductions

I don't think rad should be included unless samples at the adit and Cement Creek were analyzed for them.

R8 gave me access to their data viewer when I asked about samples/analytes for the incident location.

Do you guys have access to the R8 data viewer?

From: Terry, Robert

Sent: Tuesday, August 11, 2015 1:26 PM

To: Allen, HarryL; Guria, Peter; Hiatt, Gerald; Nattis, Randy; Wise, Robert

Cc: Black, Ned

Subject: RE: Mine Wastes in Arizona - Introductions

Uranium and radium should be included in the requests for analysis but that analysis can be done using the sample that's collected and preserved for metals analysis (radium analysis requires at least 1 Liter so the sample for metals should be a 1 gallon cubitainer).

The Colorado Department of Public Health and Environment (CDPHE) can do an excellent job of both uranium and radium analysis. I would imagine that their Water Quality Control Division is already collecting samples and they are well experienced in all the issues related to the discharge. A similar discharge occurred from the ARGO tunnel in Idaho Springs around 1980; the state and local water districts did an excellent job of managing the intakes into water supplies at that time.

Is Region 8 in communication with CDPHE?

From: Black, Ned

Sent: Tuesday, August 11, 2015 11:41 AM

To: Nattis, Randy; Guria, Peter; Allen, HarryL; Hiatt, Gerald; Terry, Robert

Cc: Wise, Robert

Subject: RE: Mine Wastes in Arizona - Introductions

I haven't heard any mention of it yet. Offhand I'd say the folks from R8 or R6 should do this.

I've included our rad guy here in R9 in the discussion.

ned black, ph.d.

us epa r9

regional cercla ecologist

415-972-3055

Please be advised I currently have limited access to email when I am not in the office (e.g., on travel), therefore please be patient with any communication delays.

From: Nattis, Randy

Sent: Tuesday, August 11, 2015 11:02 AM

To: Guria, Peter; Allen, HarryL; Black, Ned; Hiatt, Gerald

Cc: Wise, Robert

Subject: Fw: Mine Wastes in Arizona - Introductions

We are starting to hear noise about needing to sample NORM. Do you if R8 has sampled the source material for NORM? I'd rather have that drive our operations oppose to speculation. Has anyone within the EU talked about the need to sample for NORM?

Thanks,

Randy B. Nattis Federal On Scene Coordinator U.S. EPA Region 9 75 Hawthorne Street, 8th Floor San Francisco, CA 94105 nattis.randy@epa.gov Phone - (415) - 940-1108 - Cell

From: Rosenblum, Shelly

Sent: Tuesday, August 11, 2015 10:15 AM

To: Aubrey Godwin

Cc: Nattis, Randy; Wise, Robert

Subject: Mine Wastes in Arizona - Introductions

Aubrey, Randy and Rob: FYI

I spoke with Randy Nattis, Superfund On-Scene Coordinator. He said that since these are gold mine wastes, they have not been sampled for naturally occurring radioactive materials. See contact information below.

Aubrey Godwin, Director

Arizona Radiation Regulatory Agency

602-255-4822

Randy Nattis

Superfund On-Scene Coordinator

415-972-3053

Robert Wise

Superfund On-Scene Coordinator

562-733-0466

Shelly Rosenblum

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